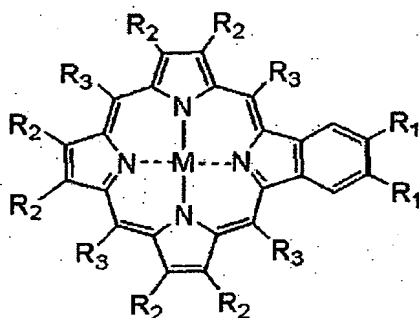


ABSTRACT

A field effect transistor is provided which comprises an organic semiconductor layer comprising a compound having a monobenzoporphyrin skeleton represented by the general formula (1):



wherein R₁ and R₂ are independently selected from the group consisting of a hydrogen atom, a halogen atom, a hydroxyl group, and alkyl, alkenyl, oxyalkyl, thioalkyl, alkyl ester and aryl groups each having 1 to 12 carbon atoms with the proviso that adjacent R₁ may be the same or different and adjacent R₂ may be the same or different and that at least two of R₂ are not hydrogen atoms; R₃ is a hydrogen atom or an aryl group; and M denotes two hydrogen atoms, a metal atom or a metal oxide.